



UNITED STATES MARINE CORPS

MARINE AIR CONTROL SQUADRON 1 (REIN)

BOX 99170

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IN REPLY REFER TO:

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S-3

6 Jan 00

From: Commanding Officer, Marine Air Control Squadron 1 (REIN)

To: Commanding Officer, Marine Air Control Group 38

Subj: **COMMAND CHRONOLOGY FOR PERIOD OF 1 JULY - 31 DECEMBER 1999**
(REPORT SYMBOL MC-5750.06)

Ref: (a) MCO 5750.1G
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(c) WgO 5750.2B
(d) GruO 5750.1J

Encl: (1) Marine Air Control Squadron 1 (REIN) Command Chronology
(Report Symbol MC 5750.06)

1. In accordance with references (a) through (d), the enclosure is submitted.

A handwritten signature in black ink, appearing to read "G. K. Wilkinson".

G. K. WILKINSON

MARINE AIR CONTROL SQUADRON 1 (REIN)

COMMAND CHRONOLOGY

1 JULY TO 31 DECEMBER 1999

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SECTION 1

ORGANIZATIONAL DATA

1. Unit Description

a. Reporting Unit Code: M00880

b. Table of Organization numbers: 8641/8642/8644/8633 (x4)

2. Period Covered and Location: 1 July to 31 December 1999 at Cannon Air Defense Complex, MCAS Yuma, Arizona; 32 Area, MCB Camp Pendleton, California; MCAS Miramar, San Diego, California.

3. Personnel Information

a. Commanding Officer Lieutenant Colonel Gregory K. Wilkinson
1 July 1999 - 31 December 1999

b. Executive Officer Major William P. Cabrera II
1 July 1999 - 10 August 1999
Lieutenant Colonel Mark C. Blaydes
11 August 1999 - 31 December 1999

c. Sergeant Major Sergeant Major Jesse Nino
1 July 1999 - 31 December 1999

d. Subordinate Commanders

(1) Headquarters and Service Detachment First Lieutenant Albert E. Yarbrough
1 July 1999 - 31 December 1999

(2) Tactical Air Operations Center Detachment Major Gregory C. Loftesnes
1 July 1999 - 31 December 1999

(3) Early Warning and Control Detachment Captain James E. O'Harra
1 July 1999 - 31 December 1999

(4) Air Traffic Control Detachment Alpha Captain Trent J. Ferris
1 July 1999 - 31 December 1999

(5) Air Traffic Control Detachment Bravo First Lieutenant Kevin R. Korpinen
1 July 1999 - 31 December 1999

(6) Air Traffic Control Detachment Charlie Captain Jeffrey P. Olson
1 July 1999 - 31 December 1999

(7) Air Traffic Control Detachment Delta Captain Walter S. Skrzynski
1 July 1999 - 31 December 1999

e. Principle Staff Members

(1) Adjutant Second Lieutenant Tineka M. Barrs
1 July 1999 - 31 December 1999

(2) S-2 Officer First Lieutenant John H. Rinaldi
1 July 1999 - 31 December 1999

(3) S-3 Officer Major William P. Cabrera II
1 July 1999 - 31 December 1999

(4) S-4 Officer First Lieutenant Gregory R. Freeman
1 July 1999 - 31 December 1999

(5) S-6 Officer Major Ronald R. Dugas
1 July 1999 - 31 December 1999

f. Staff Historian Master Gunnery Sergeant Gary E. Racel
1 July 1999 - 31 December 1999

4. Average Monthly Strength:

	USMC Officer	USMC Enlisted	USN Officer	USN Enlisted
July	59	514	1	4
August	59	518	1	4
September	60	531	1	4
October	60	519	0	4
November	63	504	0	3
December	63	504	0	3

5. Equipment:

AN/TPS - 59(V3) Radar	2
AN/MRC - 145 (Radio set)	3
AN/TYQ - 23 (Tactical Air Operation Module)	6
AN/MSQ-124 (Air Defense Communications Platform)	2
AN/TSM - 170 (Technician/Maintenance Shelters)	4
AN/TSQ - 131 (Command and Control Subsystem)	8
AN/TSQ - 120 (Air Traffic Control Tower)	5
AN/TPS - 73 (Air Surveillance Radar)	3
AN/TPN - 22 (Precision Approach Radar)	3
AN/TRN - 44 (Tactical Air Navigational Aid)	4
AN/TRC - 195 (Communications Central)	4
AN/TPN - 30 (Precision Microwave Landing System)	16
AN/MPQ - 62 (Continuous Wave Acquisition Radar)	4
M927/28 (5-Ton Long bed Truck)	22
M923/25 (5-Ton Short bed Truck)	9
M936 (Wrecker)	2
M997 (Ambulance)	2
M998 (High Mobility Multi-Purpose Wheeled Vehicle)	33
B0891 GEN MEP - 003A/803A	9
B0953 GEN MEP - 005A/815	6
B1021 GEN MEP - 006A	28
B0730 GEN MEP - 016B	7
B0921 GEN MEP - 112/813	8
B1016 GEN MEP - 115A	19
B0005 36000 BTU 50/60 HZ A/C	22
B0006 60000 BTU 400 HZ A/C	14
B0012 36000 BTU 50/60 /400 HZ A/C	22
B0007 60000 BTU 50/60 HZ A/C	18
B2567 644E TRAM Forklift	1

SECTION 2

NARRATIVE SUMMARY

Command, Operations, and Training

During the second half of 1999, the Squadron continued to focus its efforts on ensuring quality, versatility, and commitment to excellence in all areas of operations and training. During this period, the Squadron provided Command and Control support for numerous exercises while deployed and in garrison. Ongoing long term commitments to provide GCI controllers continued with 2 marines attached to VMFT-401 and 2 Marines attached to MAG-11 at MCAS Miramar, CA.

Following their move from MCB Camp Pendleton to MCAS Yuma, the Early Warning and Control Detachment officially, stood up on July 1, 1999. While there were no major Squadron deployments during this period, the Squadron supported numerous exercises that required the deployment of less than an entire Detachment. Elements of the TAOC Det and the EW/C Det supported the USAF Redflag exercise at Nellis AFB, NV during July-August. The EW/C Det provided Marines to support MEFEX/UFL during July and August while the TAOC Det deployed Marines to White Sands Missile Range, NM during September, October, and November to support U.S. Army Patriot Advanced Capabilities (PAC-3) Test. Additionally the TAOC Det provided Marines ISO HUMRAAM testing. The Squadron also supported CAX 1&2 and Desert Knight/Steel Knight Exercises at MCAGCC 29 Palms with Marines augmenting the TACC and ATC Facilities. On several occasions during this period the Squadron conducted Data Link Exercises both internally and with USAF agencies. The TAOC Det conducted a Deployment Readiness Exercise (DRE) during Nov.

During this period, the ATC Dets participated in events that were characterized by the need to improve current functioning and achieve community wide ATC goals. MACS-1 ATC Detachments worked toward cultivating enhanced timeshare agreements at the 3 West Coast air stations. Increasing the parameters of the current timeshare agreements will enable MACS-1 and station controllers to use expeditionary ATC equipment to provide approach and arrival control services to aircraft in addition to the final control services and monitoring currently provided. Throughout the period, ATC Dets provided MMT personnel for the 11th, 13th, and 15th MEU's. The Dets also provided numerous MMTs at locations including Stoval, AZ and Hunter Liggett, CA in support of 3d MAW squadrons.

In October, MARADMIN 43599 announced the instructions for implementation of the ATC enlisted MOS consolidation. Based on the recommendations of a 1997 aviation manpower QMB chartered PAT, the streamlined MOS structure is one of several initiatives expected to aid in correcting current manpower shortages. Planning and coordination commenced for increased participation by the ATC Dets in CAX 5&6 and WTI 2-00. In the past, ATC participation in CAX was limited to augmenting the permanent personnel at the EAF. For CAX 5&6 however, Det D will deploy the MATCALs and be capable of providing a full range of IFR ATC services in addition to tower services resident at 29 Palms.

In December, at the MAWTS-1 WTI 2-00 IPC, it was decided that MACS-1 would put 2 ATC Dets in the field to support the exercise. The addition of the 2nd det at the Laguna FOB will significantly enhance the level of training for the ATC community as well as the WTI ATC students. Also in December, ATC Det A participated in Desert Knight/Steal Knight at 29 Palms. The det provided airspace control, aircraft routing, and enhanced communications between MACCS agencies, the TACC and aircrews. The det conducted over 488 aircraft operations over the 7 fly days of the operation.

Finally, representatives from the 4 ATC Dets attended a MCABWA ATC conference at MCAS Miramar in December. Although numerous topics ranging from operational plans to frequency allocations were discussed at the 3-day event, the emphasis was on efficient use of SUA and integration of T&R into the airstations training plans.

Personnel and Administration

The tempo of administrative activity remains high. Marines from MACS-1 continue to support the Consolidated Personnel Administration Center aboard MCAS Yuma. The Adjutant section continues to provide administrative support to the Squadron Headquarters and coordinates administrative activities with the Marine Air Control Group 38 staff.

Legal Action

The Commanding Officer is the Summary Court-Martial Convening Authority for all subordinate detachments. The following legal proceedings were held at the Squadron level:

General Courts-Martial:	1
Special Courts-Martial:	5
Summary Courts-Martial:	0
Non-Judicial Punishment:	6
Administrative Separations:	6
JAG Manual Investigations:	5

Awards

The Squadron recognized outstanding Marines by presenting them with the following awards:

Meritorious Service Medals:	6
Navy Commendation Medals:	4
Navy/Marine Corps Achievement Medals:	31
Certificates of Commendation:	48
Meritorious Masts:	20
Letters of Commendation/Appreciation:	35

Logistics and Supply

The Logistics Sections maintain their extremely high operational tempo in support of the Squadron. The Embarkation Section provided logistical support for the Transportation Of Things (TOT) and Transportation Of Personnel (TOP) for all squadron exercises and deployments as well as day to day support of subordinate detachments. The Embarkation section deployed a detachment from the TAOC for PAC-3 testing, phase 1 at White Sands Missile Range, and the detachment from EW/C for phase 2. In November, the section provided logistical support ATC Detachment Alpha in support of CAX 2 and Desert Knight at 29 Palms. The section also successfully deployed the TAOC to Scam Flats with no prior notice during a Deployment Readiness Exercise (DRE). The Embarkation section also updated all the MDSS II data for two "real world" operational plans.

The Maintenance Management Section continued to prepare the squadron for a FSMAO inspection in June. They are currently conducting internal maintenance management inspections for all the commodity sections in preparation for the inspection. The section also conducted a T/E review with the supply section.

The Safety and Hazmat Section made significant progress in reducing the number of safety and hazmat mishaps within the Squadron. The section continues to train and monitor the education of Squadron and Detachment personnel assigned as safety and hazmat representatives. All detachments were inspected with minimal discrepancies. The Safety Section conducted an all-hands Holiday Safety Stand Down prior to Thanksgiving, and implemented a Quarterly Safety Award given to the detachment with the best safety record.

The armory continued to provide outstanding support for all regularly scheduled rifle and pistol ranges. The section also supported the TAOC with weapons for the Deployment Readiness Exercise, and supported MTACS 28 with weapons for a live fire shoot during WTI 1-00.

Intelligence

MACS-1 S-2 continued to provide intelligence and security support to the Squadron staff and detachments. The Intelligence Section provided classified briefings whose topics included threat aircraft, Theater Ballistic Missiles (TBM's), and situation updates on countries within the Squadron's area of interest. The S-2 maintained squadron-wide security procedures and provided refresher, counterintelligence, and overseas briefings. Finally, they initiated gaining access to the Defense Clearance and Investigation Index that will streamline the Squadron's clearance and access granting process.

Communications and Electronics

During this period, the EW/C Det. stood up and Comm Maintenance gained the responsibility of maintaining several, additional pieces of test equipment. Comm Maintenance was the subject of an MMO inspection in the area of Maintenance Production. The results ended in no formal findings. During the Squadron migration from Banyan Vines to Windows NT, Comm Maintenance played a vital role. Marines went through extensive training for automated test equipment conducted at MCLB Albany using USC-646. Marines of Comm Maintenance participated in two Patriot Advanced Capability (PAC-3) Tests. The TAOC Det called upon CMU for support during their Deployment Readiness Exercise conducted at Scam Flats.

ISC started with a heavy schedule. They began by building twelve computers and the architectural network for the activation of the EW/C Detachment. ISC then turned their focus on the Squadron Intranet. During this process they found themselves taking the Squadron from the Banyan Vines to Windows NT. They accomplished this task with little interruption to the Squadron tempo. Completing this task, ISC continued to build the Squadron Intranet and introduced the first version. With the Y2K scare upon us, ISC upgraded all Squadron computers to Pentium class procedures and became Y2K compliant.

Op Comm moved forward quickly by conducting extensive VHF, HF, and switchboard training. Upon completion of this, the section continued with operations involving HF and switchboard techniques. Op Comm completed months of rigorous training by deploying to Stoval and employing HF and switchboard procedures in a field environment.

SECTION 3

SEQUENTIAL LISTING OF SIGNIFICANT EVENTS

01 Jul	EW/C stands up at MCAS Yuma.
11 Jul - 13 Jul	ATC Det B deployed an MMT to Ft. Hunter Liggett ISO VMGR-352.
13 Jul - 16 Jul	ATC Det B underwent Fleet Grooming Inspection conducted by SPAWAR.
13 Jul - 29 Jul	EW/C Det deploys 3 & H&S Det deployed 1 Marine in support of MEFEX 99 at MCAS Miramar, CA.
13 Jul - 23 Aug	ATC Det D supported MEFEX with 1 Marine at MCAS Miramar.
16 Jul	ATC Det C deployed an MMT to AUX 2, MCAS Yuma, AZ ISO VMGR-352.
16 Jul	ATC Det B deployed an MMT to Laguna AAF, Yuma Proving Grounds ISO VMGR-352.
25 Jul - 28 Jul	TAOC Det, EW/C Det and ATC Det C conduct squadron wide Data Link Ex. at MCAS Yuma, AZ.
29 Jul - 14 Aug	EW/C Det deployed ADCP ISO Redflag Exercise, Nellis AFB, NV.
30 Jul - 01 Aug	ATC Det B provided a static display for the MCAS Miramar Air Show.
02 Aug - 06 Aug	ATC Det C underwent Fleet Grooming Inspection conducted by SPAWAR.
09 Aug - 20 Aug	ATC Det A provided MMT support for VMGR-352 at Ft Hunter Liggett.
11 Aug - 27 Aug	EW/C Det deployed 3 & H&S Det deployed 1 Marine ISO exercise UFL-99 MCAS Miramar, CA.
07 Sep - 17 Oct	H&S Det deployed 1 GCI controller ISO German Air Force Fighter Weapons School at Holloman AFB, NM.
10 Sep - 17 Sep	ATC Det A deployed to Red Beach ISO MWSS-372 FEX.
13 Sep - 27 Sep	TAOC and EW/C Dets supported Patriot PAC-3 Interoperability Test at WSMR.
21 Sep - 04 Nov	ATC Det A deployed 1 Marine ISO 11th Marines Operation Bright Star, Egypt.
24 Sep	ATC Det B conducted M240 G Live Firex.
24 Sep - 25 Sep	ATC Det B hosted static display of next generation Mobile ATC Equip, (ATNAVICS).
03 Oct - 14 Nov	EW/C det deployed 2 Marines to 29 Palms, CA ISO the expeditionary TACC during CAX 1/2.
03 Oct - 2 Nov	ATC Det A deployed 4 Marines to augment 29 Palms Tower during CAX 1/2.
05 Oct - 19 Oct	TAOC Det deployed Marines ISO HUMRAAM testing.
06 Oct	ATC Det C provided Operational Det for MACCS Tour during WTI 1-00 and MMT support for VMGR-352 at Stoval, AZ. AUX Field.
12 Oct - 16 Dec	ATC Det B deployed 3 Marines to Augment ATC Det A during CAX/Desert Knight at MCAGCC 29 Palms, CA.
20 Oct - 20 Nov	ATC Det A deployed a Radar Det ISO CAX 2 MCAGCC 29 Palms, CA.
21 Oct - 05 Nov	TAOC Det supported Patriot PAC-3 Interoperability Test at WSMR.
24 Oct - 21 Nov	TAOC Det and EW/C Det deployed 2 GCI controllers ISO German Air Force Fighter Weapons School at Holloman AFB, NM.

15 Nov - 23 Nov	EW/C Det & TAOC Det supported AN/TYQ-23 V4 upgrade testing at MCTSSA, MCB Camp Pendleton, CA.
15 Nov - 31 Dec	ATC Det D deployed 2 Marines to provide AN/TPN-30 support to NAS Pt Magu, CA.
18 Nov - 20 Nov	TAOC, EW/C and ATC Det C conducted Squadron Data Link Exercise, MCAS Yuma, AZ.
18 Nov - 21 Nov	TAOC Det conducted a Deployment Readiness Exercise, at Scam Flats, Yuma Proving Grounds (YPG).
28 Nov - 16 Dec	ATC Det A deployed a Radar Det ISO Desert Knight/Steel Knight MCAGCC 29 Palms, CA.
29 Nov	ATC Det B conducted TPN-30 Ops with VMFAT-101.
03 Dec - 14 Dec	TAOC Det deployed 2 Marines to provide Tanker Control and TATC during CAX 1/2 and Exercise Steel Knight.
06 Dec - 10 Dec	TAOC and EW/C Dets conducted TADIL-A operations with USAF from CADC and Scam Flats YPG.
06 Dec - 20 Dec	ATC Det A deployed 1 Marine ISO SOCEX 00-1.
13 Dec - 18 Dec	ATC Det C participated in AN/TPS-73 Technical Refresher Training conducted by SPAWAR.

SECTION 4

SUPPORTING DOCUMENTATION

- A. *Cactus Comet* article "MACS-1 brings part of family back home" dated 15 July 1999.
- B. *Cactus Comet* article "MACS-1 tees up morale" dated 29 July 1999.
- C. *Cactus Comet* article "Best of the best" dated 26 August 1999.
- D. *Cactus Comet* article "MACS-1 receives new radar" dated 16 September 1999.
- E. *Cactus Comet* article "Time share unites MACS-1, H&HS" dated 30 September 1999.
- F. *Cactus Comet* article "Key Volunteer honored" dated 7 October 1999.
- G. *Cactus Comet* article "MACS-1 meet mayhem" dated 4 November 1999.
- H. *Cactus Comet* article "MACS-1 hosts pro stock hot rod" dated 18 November 1999.
- I. *Cactus Comet* article "Man on rappel, MACS-1 Marines take time out to train on station rappel tower" dated 16 December 1999.

Cactus Comet

Volume 13 Number 28

Spring Marine Corps Air Station Yuma, Ariz.

July 15, 1999

MACS-1 brings part of family back home

Sgt. Brenda Varnadore
Cactus Comet

Marine Air Control Squadron-1 held a ceremony July 1 to signify the official beginning of the Early Warning and Control Detachment at Marine Corps Air Station Yuma.

Lt. Col. Greg Wilkinson, commanding officer, MACS-1, presented Capt. James O'Harra, commanding officer, EW/C Det., with a guidon for the new detachment.

"This is an outstanding opportunity that very few 7210s get," said O'Harra. "Our biggest challenge is training everyone for our next deployment, which will either be All Services Combined Integrated Exercise Tasking or Weapons and Tactics Instructors Course 2-00."

The EW/C Det. was originally part of MACS-1 in Camp Pendleton, Calif. The Marine Corps Force Structure Planning Group decided to combine MACS-7, which was part of MCAS Yuma, with MACS-1. They combined in June 1998 to form MACS-1 with the desire of the MCFSPG to form a more efficiently operated, reinforced squadron.

Although the headquarters of MACS-1 was located in Yuma, the

EW/C Det. remained at Camp Pendleton. A decision was then made by the 3rd Marine Aircraft Wing to consolidate the EW/C Det with the Tactical Air Operations Command Det., said Master Sgt. Carter, radar noncommissioned officer-in-charge, TAOC, MACS-1.

The EW/C Det. is made up of an AN/TPS-59 radar and two operator modules. The 59 is capable of controlling aircraft in a 300-mile area, 360 degrees. The OMs are used as a command center to control aircraft. The Marines in the OMs can talk to the pilots, via radio and let them know of any aircraft in their airspace, said Lance Cpl. Daniel Henry, operator, EW/C.

EW/C will be used in garrison to support Marine Air Group-13 and MAG-11 with ground intercept support, said O'Harra. They will also have data link operations. During field operations, EW/C will control overall air space and missiles. They are also a key players in the Theatre Missile Defense platform.

"Our biggest obstacle is getting all facilities back to where they need to be," said O'Harra. "We are already administratively stood up. Monday, (July 12) we should be operationally capable."

Figure A

MACS-1 tees up morale



Sgt. Brenda Varnadore
Cactus Comet

The warm morning and still air provided perfect weather for the Marines from Marine Air Control Squadron-1 to participate in a scramble golf tournament, July 16.

The tournament was held at the Desert Hills Golf Course. There were four players on each team. After all players teed off, the longest drive was chosen as the best ball. The rest of the team placed their balls within a yard of where the best ball had landed and they played from there. This happened at every hole.

"We tried to mix up the teams from all the different sections throughout MACS-1," said Sgt. Major Jesse Nino, sergeant major, MACS-1. "This gives the Marines a chance to meet people they might not know in their unit."

The golf tournament was held to increase morale, said Nino. MACS-1 usually holds softball tournaments, field meets or other activities to bring the unit together.

"The golf tournament is something fun and different," said Cpl. Joe Garcia, communications technician, MACS-1. "I like coming out here and kicking it with my friends."

"Some Marines spent more time playing bumper golf carts than golfing," said Cpl. Grant Sniffin, communications technician, MACS-1. "Even though some of us

didn't know how to play golf, it was still a good time."

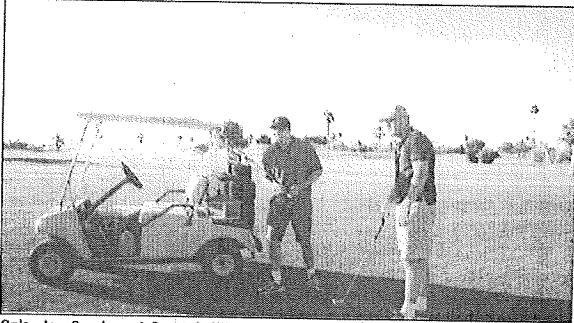
The first place team included Master Gunnery Sgt. Gary Racel, Gunnery Sgt. Dale Billingsley, Sgt. George Link, and Lance Cpl. Israel Stone, all from S-3 training, MACS-1. Their team scored a 71, which was one under par.

Recognition was also given to Gunnery Sgt. Robert Van Horn, noncommissioned

officer-in-charge, Air Traffic Control Detachment "C" MACS-1, for the longest drive, and Sgt. Daniel Branaugh, engineers, MACS-1, for closest to the pin.

"I've never played golf in my life," said Bergen Baker, intelligence, MACS-1. "But it is better than being in work."

According to Nino, more than 80 people participated.

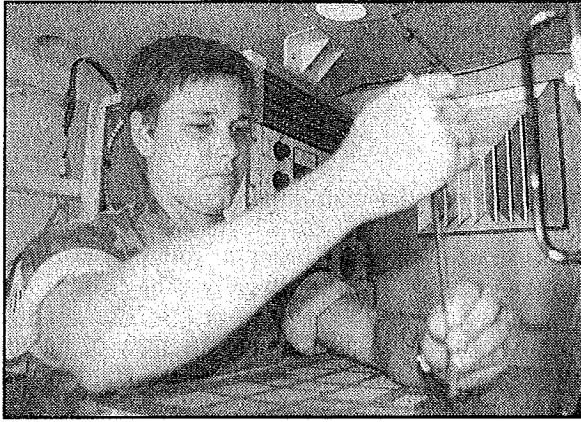


Cpls. Joe Garcia and Grant Sniffin, communications maintenance, Marine Air Control Squadron-1, discuss which the right club will be for their next shot during MACS-1's golf tournament, July 16. (Photo by Sgt. Brenda Varnadore)

Even though it was his first time golfing, Cpl. Grant Sniffin, communications maintenance, Marine Air Control Squadron-1, and his team finished four over par. (Photo by Sgt. Brenda Varnadore)

Figure B

Best of the best



Cpl. Jamie Turquitt, communications technician, Marine Air Control Squadron-1 Detachment "C," inspects a GRC171(V)1 ultra-high frequency radio. Turquitt recently was named the 3rd Marine Aircraft Wing Noncommissioned Officer of the Second Quarter. *(Digital image by Cpl. Jason Schaap)*



Sgt. Phillip Cooper, aircraft firefighting and rescue specialist, Headquarters and Headquarters Squadron Crash, Fire and Rescue, who was recently promoted meritoriously, is the H&HS Noncommissioned Officer of the Second Quarter. *(Digital image by Cpl. Jason Schaap)*

Figure C

Cactus Comet

Volume 43 Number 36

www.yuma.usmc.mil/cactus.htm

Sept. 16, 1999

MACS-1 receives new radar

Cpl. Brandon Wells
Cactus Comet

The Tactical Air Operations Center, Marine Air Control Squadron-1, is preparing to receive an upgraded version of the CW radar. The CW upgrade will include interrogator friend or foe technology enabling the system to enhance MACS-1's mission capability.

For MACS-1, TAOC, the mission is to provide information during exercises, like the Weapons and Tactics Instructors Course, for one example. Operator crews are constantly training to provide a recognizable air picture for the pilots and gunners from Low Altitude Air Defense Battalion.

From an air defense perspective MACS-1 can be described as the long range eyes for the tactical air commander which enables the command element to put rounds on target, according to Master Sgt. Steve T. Carter, radar platoon noncommissioned officer-in-charge, MACS-1.

Soon TAOC will welcome a new upgraded radar system which will allow them to support units, like LAAD, more efficiently, not only with basic radar, but identification of areas some radar systems cannot see, according to the Lexington, Va. native.

This is important because an upgraded radar system can reveal enemy aircraft at a distance allowing TAOC to protect friendly aircraft and giving certain elements of the Marine Air Ground Task Force time to prioritize targets, according to Gunnery Sgt. George J. Pesce, maintenance chief, Sensor Acquisition Section, MACS-1.

According to Pesce, a Johnstown, N.Y. native, without the ability to identify targets, the tactical air commander could lose an important element which enables him to command and coordinate his forces in a speedy manner.

To acquire the information the TAC needs, MACS-1 uses the AN/TPS-59(v)3 radar with an interrogator friend or foe capability. This radar system is like a wide angle camera lens, and is able to identify all aircraft within its line of sight. When the radar system detects an aircraft, the Marines from the TAOC then identify it as friend or foe and can help the pilots in the air by pointing them in the right direction. However, the 59 cannot see everything because of natural obstacles like mountains. Basically this radar system works by line of sight so if an object gets in the way, the system is blind to aircraft behind the object.

(See RADAR, Page 4)

RADAR ... from Page 1

The AN/MPQ-62 Continuous Wave acquisition radar is deployed to the 59's blind spots, behind mountains, and in valleys to provide the TAOC with a detailed radar picture. Now the upgraded CW system will not only fill in the missing radar information, but it will also provide important descriptions of aircraft, specifically if the aircraft is friend or

foe, as it will be fitted with new IFF technology, according to Pesce.

By using this technology the MACS-1 TAOC can accomplish its mission by enabling pilots and personnel manning the surface to air missile platforms to defend friendly air and ground sites, and destroy hostile air and ground targets.

Exercises like WTI provide an

opportunity for MACS-1 to examine current methods of tactical data distribution within the MAGTF's external joint force command. New technology air control platforms will use the CW, recently acquired by MACS-1. There will also be an evaluation of new tactics, techniques and procedures for processing data with the upgraded CW.

Figure D

Cactus Comet

Volume 43 Number 38

www.yuma.usmc.mil/cactus.htm

Sept. 30, 1999

Time share unites MACS-1, H&HS

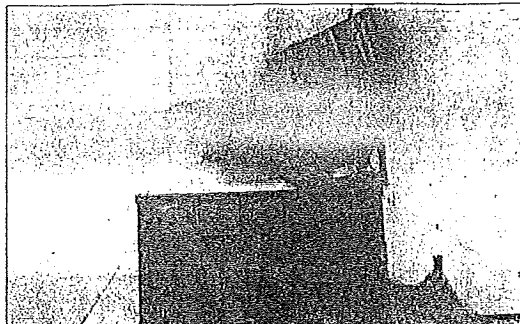
Lance Cpl. Eric Cantu
Cactus Comet

Every Thursday, a group of Marines form a partnership on a dusty patch of dirt and rock just outside the air station at Gate M on Avenue A. Speeding motorists easily miss the desert camouflaged conex boxes, generators and radar dishes as their cars whiz past the quiet establishment.

The face of an AN/TPS-73 radar scans the skies while Marines inside the air conditioned conex boxes study bright colorful screens in the dark room.

The partnership is between Marine Air Control Squadron-1, Air Traffic Control Detachment "C," and Headquarters and Headquarters Squadron air traffic controllers. Together, they make up a small training program called time share.

According to Sgt. Brian Blecha, air traffic controller, MACS-1, the station Marines leave their regular posts at the permanent ATC station to enter the scenario of a mobile



An AN/TPS-73 radar spins at Gate M during the time sharing program Sept. 9. (Photo by Lance Cpl. Eric Cantu)

ATC station. The Omaha, Neb. native said the station Marines see and use the equipment they would use in a real world situation.

Cpl. Audra Jennings, ATC instructor, H&HS, said about seven station Marines rotate the three seats available at the mobile site. The Farmville, Va. native said most of

the station Marines who use the equipment are training to become certified air traffic controllers.

The bulk of what they are learning is how to guide aircraft in surveillance and precision approaches using blips on radar screens and their ability to communicate with pilots. In a surveillance approach, the controller guides the incoming aircraft within a mile of the runway. At that point, the pilot proceeds visually. On a precision approach, it is up to the controller to guide the aircraft all the way down to the runway.

During the week, station controllers visit the mobile unit and practice controlling aircraft on a simulator. According to Blecha, the simulators at the mobile site are newer, faster and more user friendly than the simulators at the station facility. The result is more realistic training for the trainees.

Thursdays are the days which students get to work with live pilots and real aircraft. On occasion, and under the watchful eye of an instructor, the students guide the aircraft to a touchdown on the station flightline.

Lance Cpl. Rodney Guthrie, trainee, station ATC, who guided his first aircraft on the mobile unit Sept. 10, said although the simulators are very realistic, bringing in a real aircraft was a little different.

"I was a little nervous," said Guthrie. The Pittsfield, Ill. native said he did well but not perfect. "I forgot a few key things." Although he could have done better, Guthrie knows he is learning. "It was excellent training."

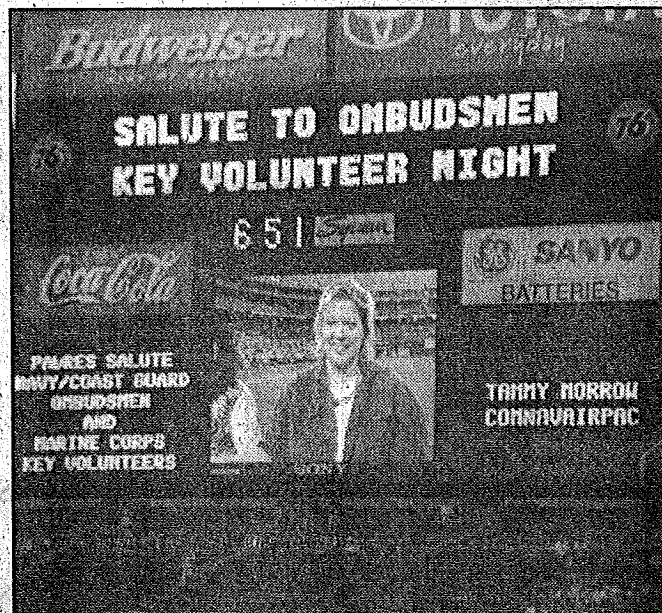
Jennings said most station ATC controllers look forward to getting their hands on the mobile gear. "It's a good experience," said Jennings. "I wish we had more time."



Air traffic control instructors from station ATC aid students during simulated ATC scenarios. The station personnel use the equipment provided by the Marine Air Control Squadron-1 mobile ATC unit. (Photo by Lance Col. Eric Cantu)

Figure E

Key Volunteer honored



Denise Loftesnes, Key Volunteer from Marine Air Control Squadron-1 was honored on Sept. 10, by the San Diego Padres, along with nominees from the Navy and Coast Guard Ombudsman programs. Lt Col. Doug Fegenbush, executive officer, Marine Aviation Logistics Squadron-13, nominated Loftesnes as the honoree from the station Key Volunteer Network. Loftesnes received a certificate at home plate before the San Diego Padres/Montreal Expos game, and the presentation was featured on the Jumbotron screen. Congratulations from MCAS Yuma, Denise!
(Photo courtesy of Sandra Hayes)

Figure F

MACS-1 meet mayhem

Cpl. Eric Cantu
Cactus Comet

It was a small war during the Marine Air Control Squadron-1 field meet Oct. 15 at the soccer field. The combatants were MACS-1 vs. MACS-1.

With five teams, including a combined Camp Pendleton/Miramar team, battling it out in grueling events for squadron bragging rights, the competition was fierce.

The biggest and heaviest event was the 5-ton truck pull. Each team gripped a thick rope attached to the front of the large machine and "heaved" and "ho'd" the truck about 100 feet uphill.

One of the things family members said they liked about the field meet was that everyone participated. After some serious coaxing, begging and threats, a few of the wives rolled their sleeves up and took the 5-ton on. As they strained and pulled, the truck started moving; slowly at first then it picked up speed. The crowd cheered for the tough spouses. As they crossed the finish line, the truck kept moving and the Marines in the rear of the truck stopped pushing.

An event where everyone could participate together was the three-legged race. At first, Marines teamed up with children to cover the 30 yards of

grass on three legs. Some were in sync and moved gracefully. Other Marines elected to just pick up the child and run. The Marines also ran the race with their spouses.

The most disorienting event was the "Dizzy Izzy" relay race. During this nauseating game, participants must place their foreheads on one end of a baseball bat and the other end on the ground. They then spin around 10 times and run to the opposite end of the field, spin 10 more times and tag the next spinner. Although they each had a designated place they were supposed to start and finish, many of the participants ended up somewhere else.

"I don't know what happened, I couldn't even stand up," said Pfc. Rico Rivera, supply detachment "A." After spinning the first 10 times, Rivera veered severely to the left and accidentally tackled a group of spectators on the sideline. He jumped right back up and kept running but went back into the crowd. He hit one spectator so hard, he busted the spectator's closed soda can. The rest of the crowd was laughing hysterically.

He took off running and again he flew left. He went off the field and smashed into a fence. One Marine was laughing so hard, tears were rolling down his face.

After all the fun and hype,

the competition got tougher. The Marines mustered at the pull-up bars. Each Marine pumped out as many pull ups as they could and added it up for the team.

The final event was the tug-of-war. Marines dug their heels into the grass and gritted their teeth. But it was Det. "A" that came out victorious.

After the physical competition was completed, another competition began; a bidding competition. The squadron raffled off home made cakes. Some of the cakes went for more than \$50. Aside from the great taste, Marines also received various time off rewards such as 72- and 96-hour liberty passes.

Regardless of the event, the Marines and families were together.

"You get to know the people you work with on a personal level," said Sgt. Ray Morgan, communications maintenance, Headquarters and Service detachment. It was also a good experience for the California based Marines to meet the Yuma Marines.

"It was good to actually interact with our counterparts," said Gunnery Sgt. Giovanni DiMino, air traffic control detachment "D," Marine Corps Air Station Miramar. "We normally interact over the phone. It was nice to put a face with a name."

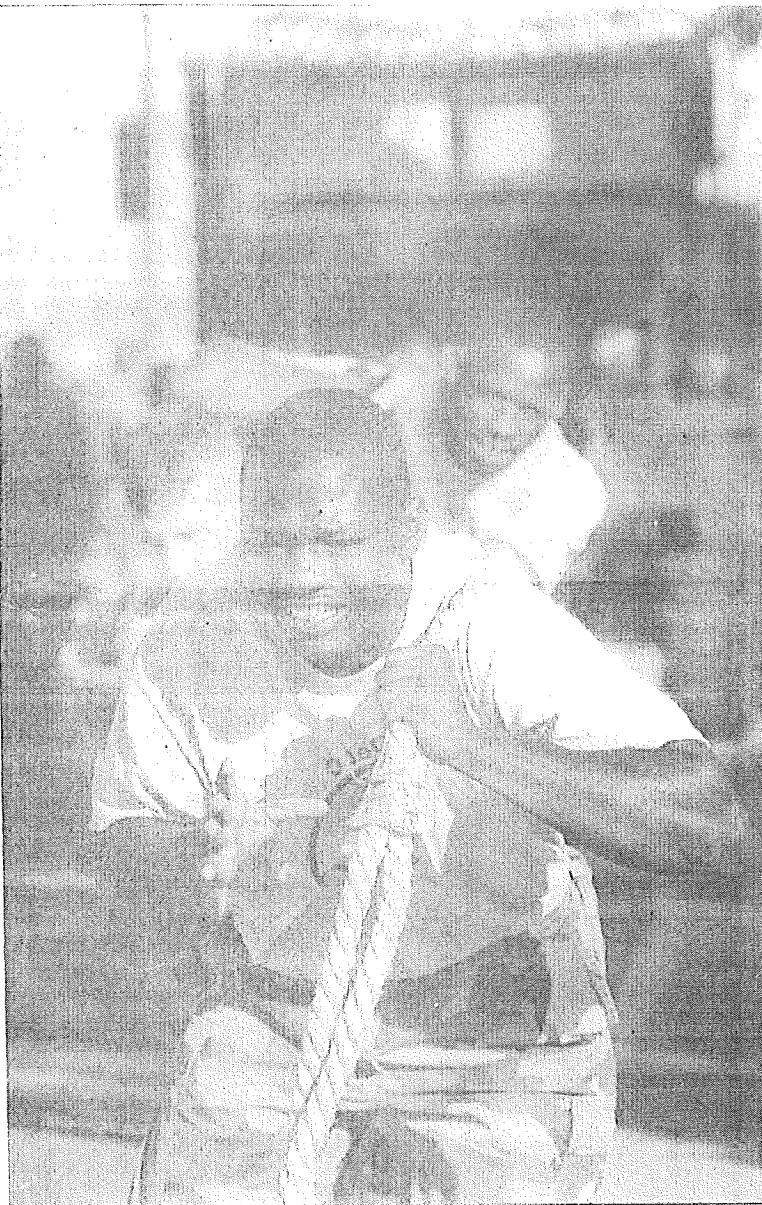
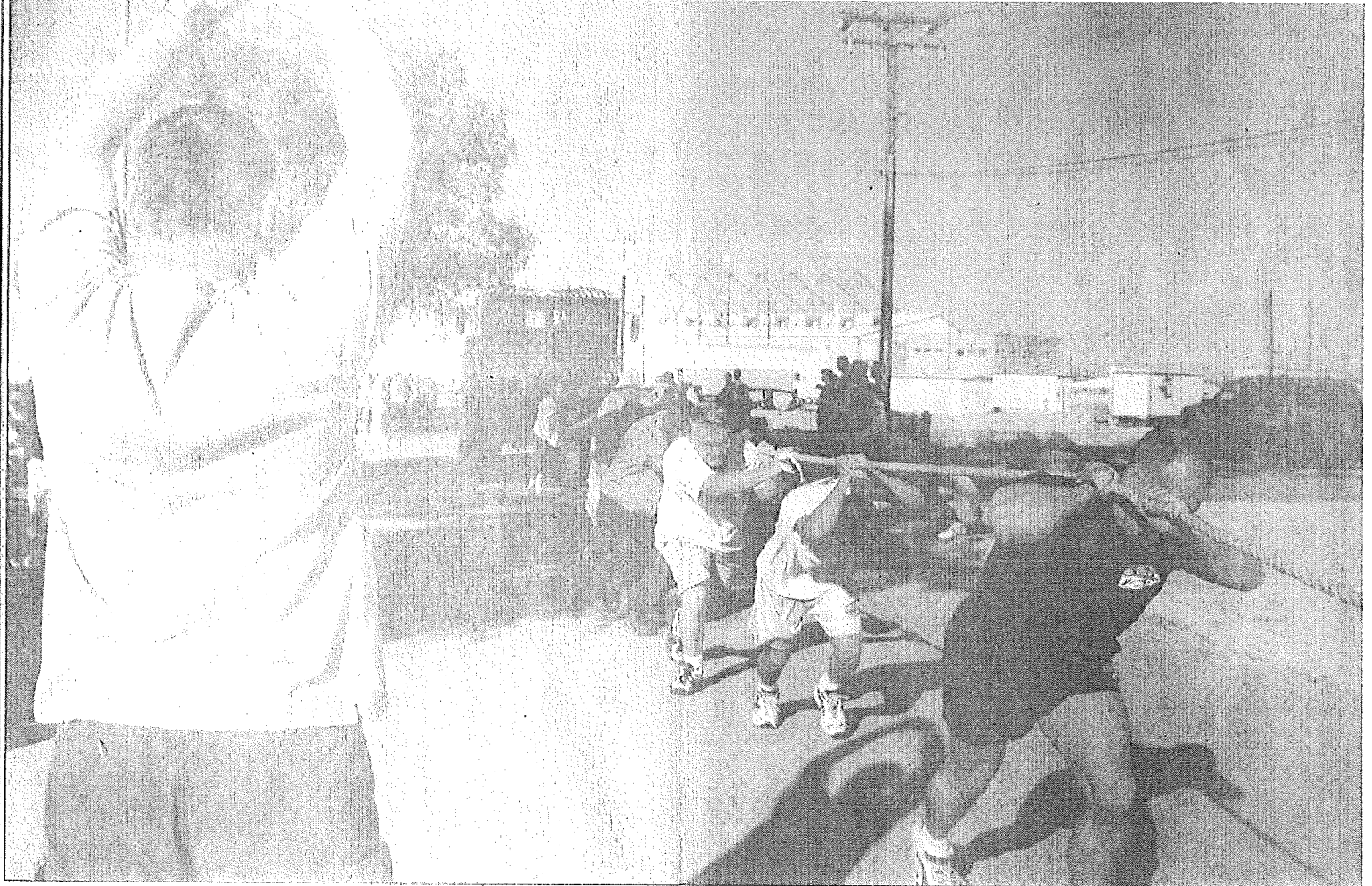
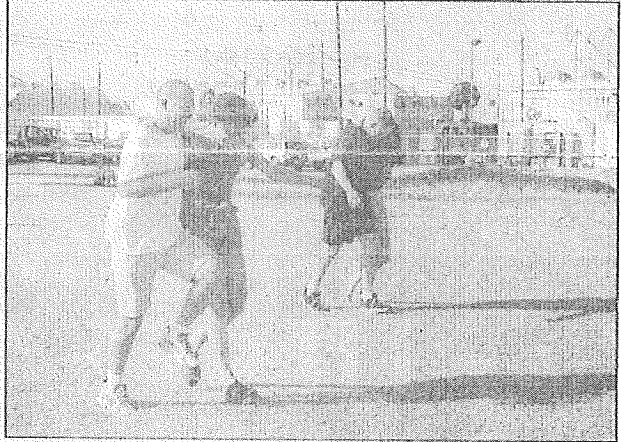


Figure G



Marines wearing flack jackets and kevlar helmets speed by during a relay race at the MACS-1 field meet. Other events included a pull-up contest, an egg toss, tug-of-war and many more. (Photo by Cpl. Eric Cantu)

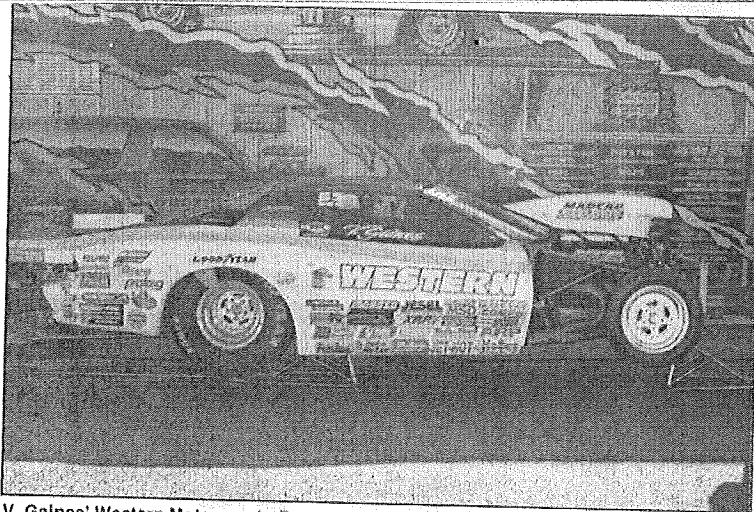
(Above) Cpl. Eugene Robinson, Det. "C" leads the pack in the 5-ton pull. The pullers had to pull a 5-ton vehicle about 100 meters to win the event. (Right) Couples join efforts to come out triumphant in the three legged race. (Photo by Cpl. Eric Cantu)



Marines from Marine Air Control Squadron-1 put their backs into it as they pull a 5-ton vehicle in a squadron-wide field meet. The detachments from Marine Corps Air Station Miramar and Camp Pendleton joined forces to form a team for the event. (Photo by Cpl. Eric Cantu)

Figure G

Cactus Comet



V. Gaines' Western Motorsports Pro stock Camaro was on display at Marine Air Control Squadron-1's Cannon Air Defense Complex Nov. 9. 1st Lt. De Vaillon J. Piper, systems operations officer, MACS-1, who often spends his spare time as part of V. Gaines' pit crew, arranged for the racer to display his car for the station Marines. (Photo by Cpl. Brandon Wells)

MACS-1 hosts pro stock hot rod

Cpl. Brandon Wells
Cactus Comet

Marine Air Control Squadron-1 received a new high-speed, low drag piece of equipment Nov. 9.

Although none of the personnel were trained to operate it, all were motivated to learn as much about the new gear as possible.

The new addition was the V. Gaines' Western Motorsports Pro stock Camaro, which was on display at MACS-1's Cannon Air Defense Complex.

The event would not have taken place had it not been for the dedicated love of the National Hot Rod Association and the sport of drag racing on the part of 1st Lt. De Vaillon J. Piper, systems operations officer, MACS-1.

For the last two years, the native of Commerce City, Colo., has followed V. Gaines, the driver and owner of the race car. Piper has been taking leave and traveling whenever a race falls on a 96-hour liberty pass, just so he can assist the mechanics in the pit crew and learn more about the sport.

Piper said he has established a well working relationship with Gaines. When races are close to the area, Gaines makes sure Piper has tickets. When the race is far, Gaines flies Piper to the race.

According to Piper, the last race of the year for the NHRA is scheduled to take place at the Los Angeles County Fairplex in Pomona, Calif. Since Gaines is from Colorado, he had to travel through Arizona.

Knowing this, Piper contacted Gaines and requested to

have the vehicle displayed for the Marines at the air station. The Camaro arrived on the morning of Nov. 9, and was shown late into the afternoon.

"It's a little bit of motivation for the Marines," said Piper.

According to Piper, many Marines are interested in drag racing and motorsports in general.

According to Rick D. Walker, crewman for V. Gaines motorsports, the event held many benefits.

"It's good for the Marines. Anytime you get information on drag racing out, that's great, and anything you can do to help the Marine Corps is great," said Walker.

The best hope for the day was to spark an interest in Marines who may not know much about drag racing, said Walker.



2nd Lt. Kirk Bush, Tactical Air Operations Center assistant officer, Marine Air Control Squadron-1, shoots down the rappel line while performing an inverted rappel at the station rappel tower Nov. 30. The TAOC shop split up over two days to participate in Marine training. (Photo by Cpl. Eric Cantu)



Cpl. Jason Mausbach hangs in an inverted rappel at the station rappel tower. Because the Marines were in a relatively small unit, they could practice more specialized maneuvers on the tower. (Photo by Cpl. Eric Cantu)

'Man on rappel'

MACS-1 Marines take time out to train on station rappel tower

Cpl. Eric Cantu
Cactus Comet

It was off to the rappel tower for the Tactical Air Operations Center. Marines from Marine Air Control Squadron-1 Nov. 29 and 30 when they left the routine of their everyday work for fast-paced, Marine Corps training.

While one group of the TAOC Marines stayed back and manned the shop, another group of about 10 set out to get some of the training they joined for. While the training day consisted of techniques on the rappel tower and shooting on the Indoor Simulated Marksmanship Trainer, the Marines said the best part of the day was the rappel tower.

"It was pretty cool," said Cpl. Travis Lindley, TAOC technician. The Corpus Christi Texas, native said he hasn't been on a rappel tower since he was in boot camp more than two years ago. "It was like trying it all over again for the first time."

The first thing the Marines

learned was preparation. They learned how to tie ropes around their waists to make their seat harnesses. The instructor took the Marines through the tying and looping instructions once, then let the Marines do the entangling job themselves. Once they were proficient in making their rope seats, they graduated to the next step.

The next things they learned were the two basic positions in the repelling scheme of things. There is the repeller and the belay person. The belay Marine holds the rope below the repeller. If anything goes wrong and if the repeller listened during the rope harness class, the belay Marine can stop the repeller from plummeting to his or her demise.

Usually, when Marines get the chance to train on the rappel tower, it is with a large group, and they are usually rushed through the process to ensure every Marine gets to rappel. But since the MACS-1 group was relatively small, they had time to do extra things — extreme things.

One of the extreme things they did was the inverted rappel. In this

maneuver, the repeller ends up head over heels, literally facing the ground. With one arm on the chest and the other extended above, the head being used as a brake, the repeller speeds straight down, upside down until he or she reaches the ground.

Staff Sgt. Steven Sagi, training chief for Headquarters and Headquarters Squadron and rappel instructor, said the inverted rappel can be used by special mission teams to peek through windows in urban environments or to better suit the mission's requirements.

"It's also just another way to rappel," said Sagi. He said the inverted rappel is normally done with no other structures around, like out of a helicopter.

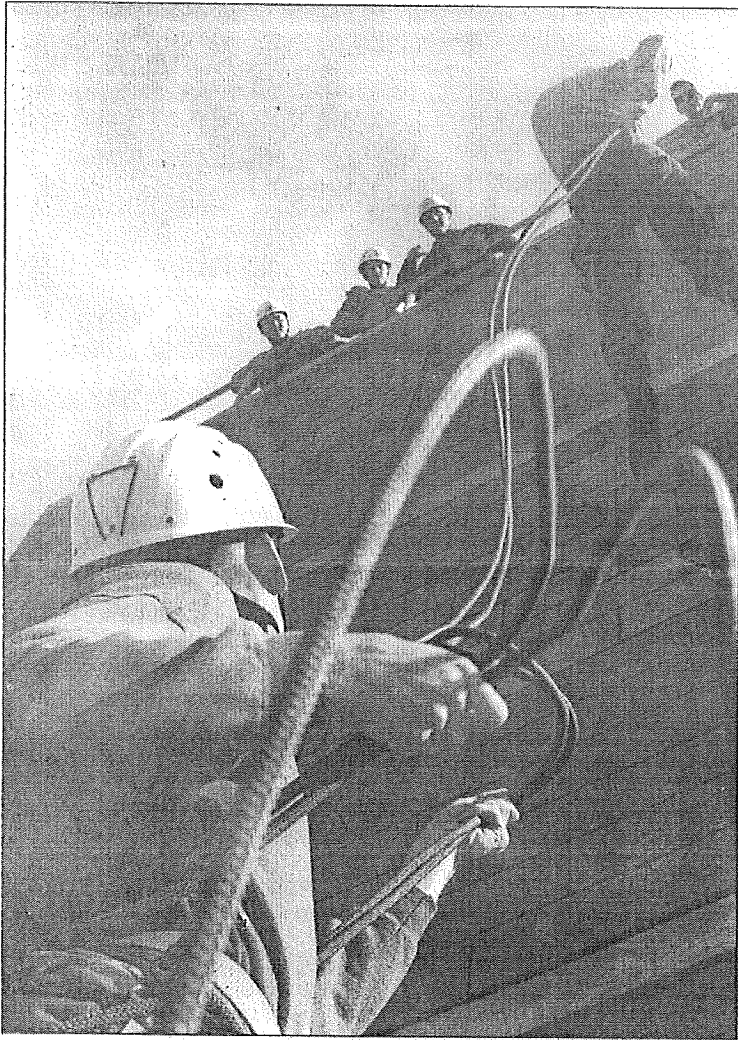
In the end, almost every Marine had done something he had never done before.

"I'm all about it. It's awesome training," said Lance Cpl. Burns, TAOC technician. "We get to do some real Marine training. Even though we're not grunts, we still get to train like them."

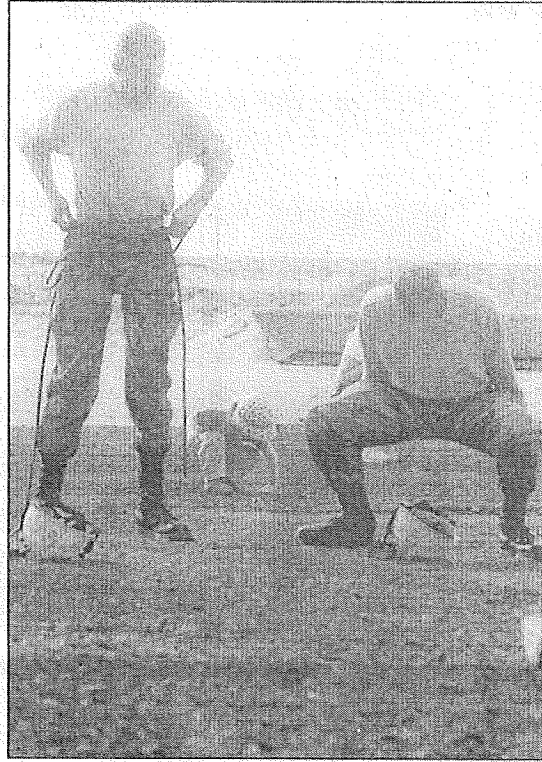


Staff Sgt. Steve Sagi, training chief for Headquarters and Headquarters Squadron and rappel instructor, lets go of the rope that is holding him from plummeting to the ground. He demonstrates that with proper technique, a repeller can literally just hang out. (Photo by Cpl. Eric Cantu)

Figure I



Lance Cpl. Donald Burns, TAOC technician adjusts the tension in the rappel line as Cpl. Travis Lindley, TAOC technician descends to earth. By properly adjusting the slack in the rope, the belay man can save a falling Marine's life. (Photo by Cpl. Eric Cantu)



(Left) As two Marine Air Control Squadron-1 Marines put the finishing loop around their seat harnesses, Kaitlin Mclean, 3, daughter of 2nd Lt. Brian Mclean, Tactical Air Operations Center officer and repeller, quietly plays in the background. (Photos by Cpl. Eric Cantu)

(Below) TAOC Marines practice tying their seat harnesses before attacking the rappel tower. Before jumping off the tower, each Marine had to learn how to tie his own seat harness. A Seat harness can make the difference between a successful rappel and a fall.

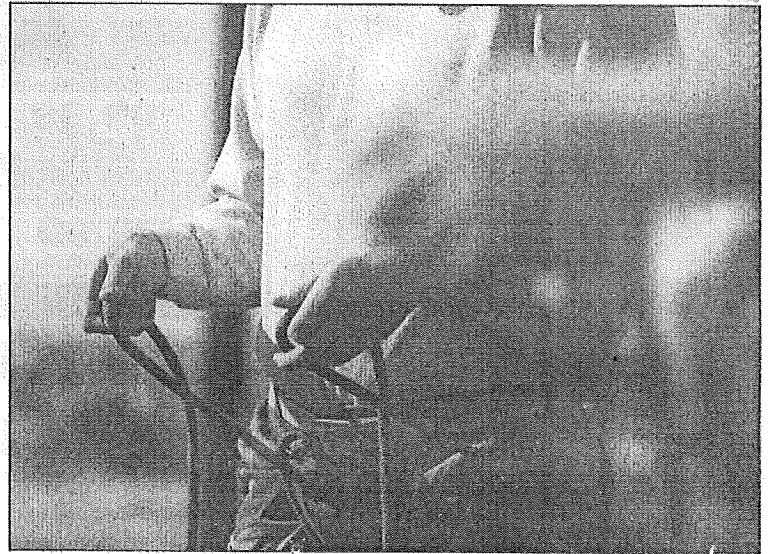


Figure I